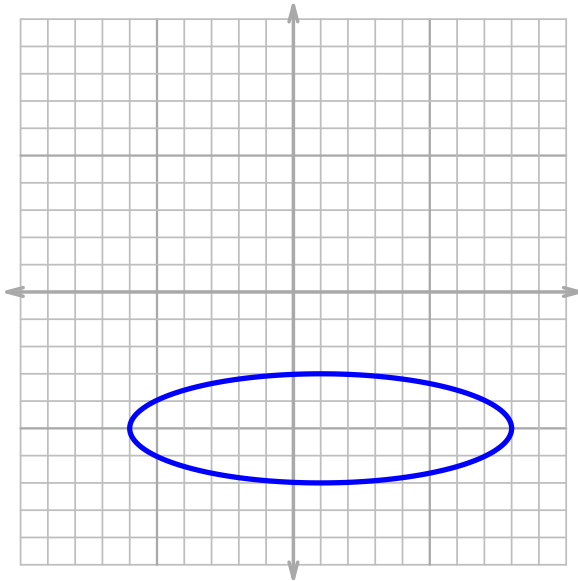


Question 1

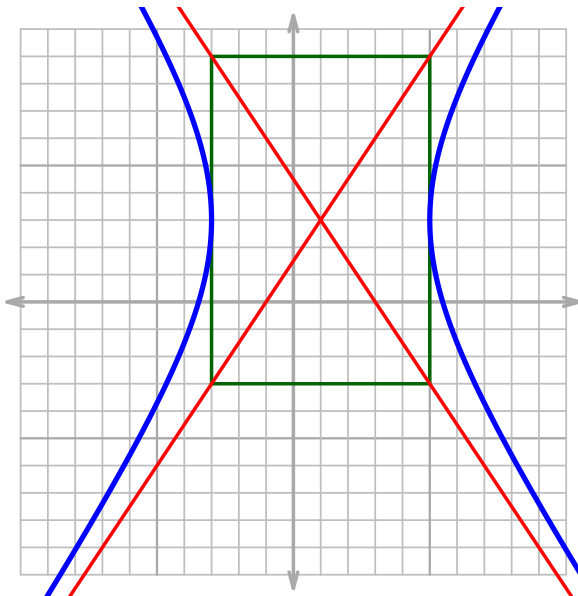
Please write the equation of the conic section graphed below. You can assume all vertices and co-vertices are on integer gridpoints.



$$\frac{(x-1)^2}{49} + \frac{(y+5)^2}{4} = 1$$

Question 2

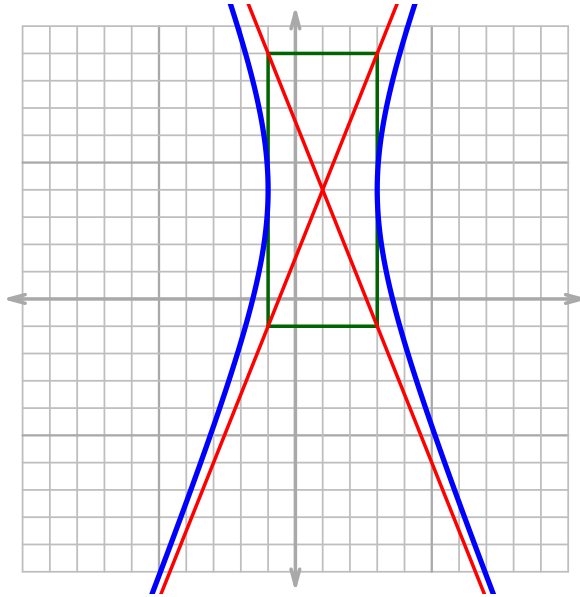
Please write the equation of the conic section graphed below. You can assume all vertices and co-vertices are on integer gridpoints.



$$\frac{(x-1)^2}{16} - \frac{(y-3)^2}{36} = 1$$

Question 3

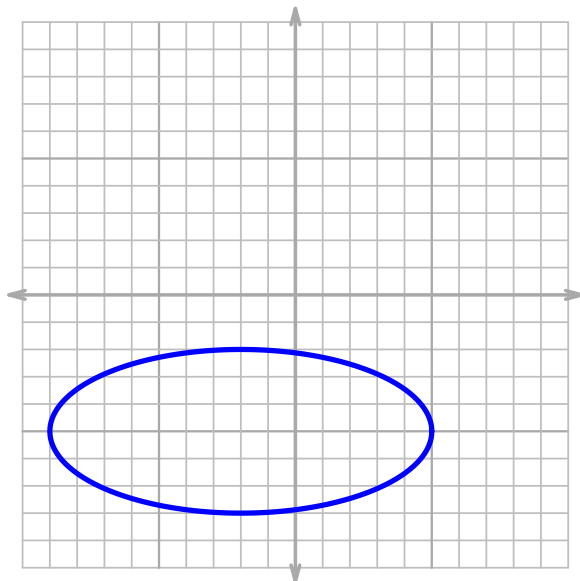
Graph the conic section represented by the equation. For a hyperbola, please include the central rectangle and the asymptotes.



$$\frac{(x-1)^2}{4} - \frac{(y-4)^2}{25} = 1$$

Question 4

Graph the conic section represented by the equation. For a hyperbola, please include the central rectangle and the asymptotes.



$$\frac{(x+2)^2}{49} + \frac{(y+5)^2}{9} = 1$$